



2018 NCDOT/Contractor Joint Training Work shop
February 5th-6th

“Project Delivery and Communication”

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The TMP Design Process

1. Analysis of Earthwork, Pavement Design, Grade Revisions, Drainage and Structures
2. Determining Traffic Management Strategy based on the above project design data and Traffic Volumes
3. Manage work zone “congestion” through Lane Closure Restrictions and Intermediate Contract Times with associated Liquidated Damages
4. Apply Safety “enhancement” devices (SFL’s, WZPL’s, DSL’s, ITS)
5. Apply Law Enforcement where appropriate



TMP components that impact “Production” and “Project Completion”

- Project “Phasing”
- ***Lane Closure/Holiday Time Restrictions***



Lane and Holiday Lane Closure Time Restrictions

- How do we establish these?
- Is there “flexibility” in the Lane Closure and Holiday Time Restrictions?



Lane Closure Time Restrictions-The “Available” Work Hours

- Can Lane Closure Time Restrictions be relaxed?
- Who’s responsible for making the decision?
- What’s the risk of changing them?
- What’s the risk of not changing them?
- What’s the impact on Project Completion?



Plan Modifications-Lane Closure Restrictions

1. Can Lane Closure Time Restrictions be relaxed?

Depends...however, they can be relaxed if the conditions are less congested than expected

If it's determined to consider relaxation of restrictions....Begin with consideration of 30 minutes early entry; not a full hour

Consider “pre-staging” the lane closures so the lane is closed as close to the available time as possible

Also, “super weekends” can be a consideration for certain facilities where lanes are closed for the weekend.



Plan Modifications-Lane Closure Restrictions

2. Who's responsible for making the decision?

- The Resident, Division and Area Construction Engineer will review the Contractors request and make the decision
- The Traffic Management Unit is available for analysis and review of the requests



Plan Modifications-Lane Closure Restrictions

3. What's the risk of changing them?

- Obviously, the risk is excessive traffic queues exceeding 2 miles
- Rear End Crashes resulting in injury or worse
- Liability and litigation are possible if crash occurs



Plan Modifications-Lane Closure Restrictions

4. What's the risk of not changing them?

- Increased exposure of installing additional lane closures
- Increased risk of not finishing Project on Schedule
- Possibly fewer resources to be available for other projects



Plan Modifications-Contractor's Responsibilities

What's the Contractor's Responsibility?

- Monitor the Traffic Queue and ensure it doesn't exceed 2 miles
- Possibly, incorporate "End of Queue" Warning systems
- If Queues exceed 2 miles, may have to resort to plan restrictions



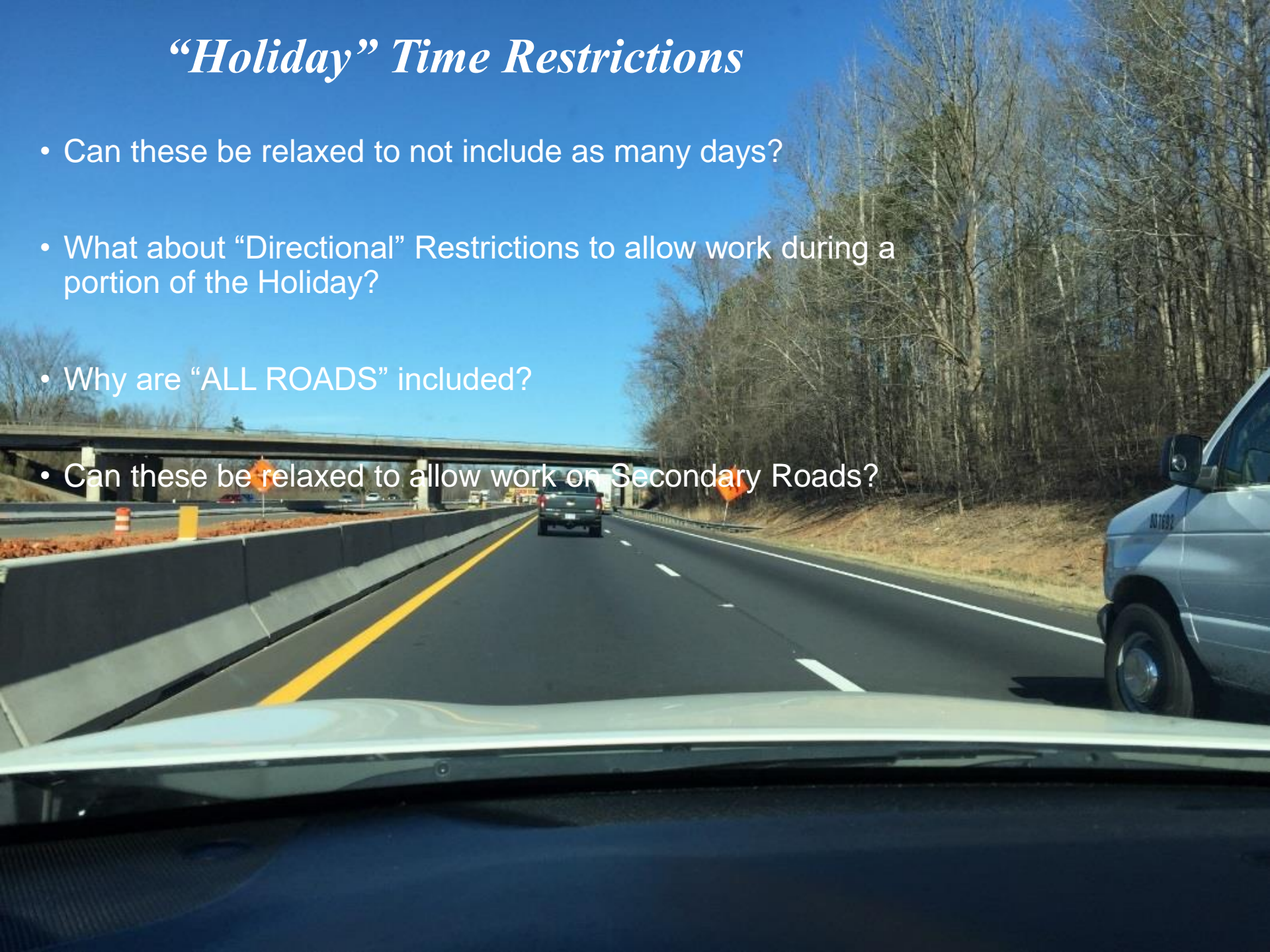
“Almost...But Not Close Enough...”



“To the Pit of Misery!!”

“Holiday” Time Restrictions

- Can these be relaxed to not include as many days?
- What about “Directional” Restrictions to allow work during a portion of the Holiday?
- Why are “ALL ROADS” included?
- Can these be relaxed to allow work on Secondary Roads?



Plan Modifications-Holiday Time Restrictions

1. Can these be relaxed to not include as many days?

Possibly, especially once the majority of the “directional” traffic has passed.

Also, night work may also be a good option

2. Why are “ALL ROADS” included?

We should be careful not to use this unless Holiday traffic is using all of the roads on the project

3. Can these be relaxed to allow work on Secondary Roads?

Normally, yes the Secondary Roads don’t carry Holiday traffic volumes

4. What about “Directional” Restrictions to allow work during a portion of the Holiday?

Possibly, most times once the “directional” traffic has passed the volumes are low enough to allow lane closures



Future of Real Time Traffic Volume Data

In the near future, we'll be able to obtain real time traffic volume data

- This will enable designers to evaluate entire Interstate Corridors and analyze Seasonal, Weekly, Daily fluctuations
- Therefore, time restrictions will be structured differently. You'll likely see them more “seasonal” and “directional” allowing more lane closure time based on recent traffic volume data



Questions?

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